

Practice: 646 - Shallow Water Development and Management**Scenario: #1 - Shallow Water Management, low level****Scenario Description:**

This scenario addresses inadequate habitat for fish and wildlife on marginal cropland or hayland, pasture or rangeland. The resource concern is addressed by providing shallow water habitat for wildlife such as shorebirds, waterfowl, wading birds, mammals, fish, reptiles, amphibians, and other species that require shallow water or exposed mud flats for at least part of their life cycle. Sites are flooded up to a depth of 18" with an average depth of 9". Water is provided by natural flooding and/or precipitation.

Before Situation:

There is inadequate habitat to provide optimum resting, nesting, and feeding habitat for waterfowl, shorebirds, and other wildlife (amphibians, reptiles, mammals, invertebrates, etc.).

After Situation:

A single area or series of shallow water areas that are managed per standard and specification for target species or guild. Water levels are regulated to maintain temporary wildlife habitat. Timing and duration of flooding and de-watering is dependent on specific species requirements. Water is generally regulated by water control structure in area to be flooded. Flooded sites vary from mudflats to water depths of 18" with an average depth of 9". The hydrologic conditions of ponding and saturation (frequency, depth, duration, timing) provides optimum seasonal habitat for waterfowl, shorebirds, and other wildlife (amphibians, reptiles, mammals, invertebrates, etc.). If needed and dikes or water control structures are not currently present on the fields planned to be flooded, these practices may be planned for the same fields and cost shared under Dike (356) and Structure for Water Control (587). Depending on local conditions, other Conservation Practices may also be required.

Scenario Feature Measure: Acre of shallow water

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: \$81.60

Scenario Cost/Unit: \$81.60

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Acquisition of Technical Knowledge						
Training, Workshops	294	Educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants.	Each	\$44.18	1	\$44.18
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.71	2	\$37.42

Practice: 646 - Shallow Water Development and Management**Scenario: #2 - Shallow Water Management, high level****Scenario Description:**

This scenario addresses inadequate habitat for fish and wildlife on marginal cropland or hayland, pasture or rangeland. The resource concern is addressed by providing shallow water habitat for wildlife such as shorebirds, waterfowl, wading birds, mammals, fish, reptiles, amphibians, and other species that require shallow water or exposed mud flats for at least part of their life cycle. Sites are flooded up to a depth of 18" with an average depth of 9". Monitoring and adaptive management accomplished with water control structures is used to meet very specific conditions needed to address previously identified degraded plant conditions or inadequate habitat for fish and/or wildlife. This high-level management is applied to lands used for crop, pasture, hay, forests or wildlife lands where target flora and fauna have been identified as a primary concern. Loss of some level of crop, forage, hay or forest products may occur depending on site specific conditions.

Before Situation:

There is inadequate habitat to provide optimum resting, nesting, and feeding habitat for waterfowl, shorebirds, and other wildlife (amphibians, reptiles, mammals, invertebrates, etc.). The site may not be subject to frequent natural flooding and water may need to be pumped or directed to the site. The potential benefits to target fauna and flora is (are) not being captured. The pumping of water and intensive management of seasonal water, coupled with monitoring, adaptive management from highly trained individuals, will fully address the identified degraded plant conditions and/or inadequate habitat for fish and/or wildlife.

After Situation:

A single area or series of shallow water areas that are managed per standard and specification for target species or guild. Water levels are regulated to maintain temporary wildlife habitat. Timing and duration of flooding and de-watering is dependent on specific species requirements. Water is generally regulated by water control structure in area to be flooded but also includes supplying supplemental water from pumping or other means. Flooded sites vary from mudflats to water depths of 18" with an average depth of 9". The hydrologic conditions of ponding and saturation (frequency, depth, duration, timing) provides optimum seasonal habitat for waterfowl, shorebirds, and other wildlife (amphibians, reptiles, mammals, invertebrates, etc.). If needed and dikes or water control structures are not currently present on the fields planned to be flooded, these practices may be planned for the same fields and cost shared under Dike (356) and Structure for Water Control (587). If a natural water source (i.e. precipitation or flooding) is not available or adequate, Pumping Plant (533) may be cost shared to provide a water source. Depending on local conditions, other Conservation Practices may also be required.

Scenario Feature Measure: Acre of shallow water**Scenario Unit:** Acre**Scenario Typical Size:** 1**Scenario Cost:** \$196.94**Scenario Cost/Unit:** \$196.94**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Acquisition of Technical Knowledge						
Training, Workshops	294	Educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants.	Each	\$44.18	1	\$44.18
Equipment/Installation						
Water management, Flooding & dewatering	969	Includes equipment, power unit and labor costs.	Acre Foot	\$128.84	0.75	\$96.63
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.71	3	\$56.13